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ABSTRACT

This document contains charts that evaluate career related assessment items. Chart categories include: Purpose/Current Uses/Format; Intended Population; Oregon Career Related Learning Standards Addressed; Relationship to the Standards; Relationship to Endorsement Area Frameworks; Evidence of Validity; Evidence of Reliability; Evidence of Fairness and Appropriateness for Special Populations; Training/Scoring Guide/Checklist/Rating Forms/Exemplar Task Available; Feasibility; and Selection Criteria Met/Pros-Cons. Part I examines the following tools and models: ACT-WorkKeys; Adult Measure of Essential Skills; Assessments in Career Education; Career Portfolio Assessment; Career-Technical Assessment Program; Career Transcript System; Commonwealth Accountability Testing System Practical Living/Vocational Studies; Comprehensive Adult Student Assessment System-Employability Competence System; Michigan Employability Skills Assessment Kit; National Occupational Competency Testing Institute Job Ready Tests; Oklahoma Vo-Tech; SCANS Interactive Prototype; SCANS/TEJAS Compendium; SkillsUSA Championships; Vocational-Technical Education Consortium of the States; WORKING; and Workplace Success Skills System. Part II looks at the following interests and aptitude inventories: ACT-Career Planning Survey; ACT-PLAN; Campbell Interest and Skill Survey; Career Scope; Hall Occupational Orientation Inventories; JOB-O; Strong-Campbell Interest Inventory; and Vocational Research Interest Inventory. (MKA)

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A COMPARISON OF CAREER-RELATED ASSESSMENT TOOLS/MODELS

PART 1: CAREER-RELATED ASSESSMENTS

PART 2: INTEREST AND APTITUDE INVENTORIES

CAREER-RELATED ASSESSMENTS

1. ACT-WorkKeys
2. Adult Measure of Essential Skills (AMES)
3. Assessments in Career Education (ACE)
4. Career Portfolio Assessment (CPA)
5. Career-Technical Assessment Program (C-TAP)
6. Career Transcript System (CTS)
7. Commonwealth Accountability Testing System Practical Living/ Vocational Studies (CATS PL/VS)
8. Comprehensive Adult Student Assessment System – Employability Competency System (CASAS – ECS)
9. Michigan Employability Skills Assessment Kit (ESAK)
10. National Occupational Competency Testing Institute (NOCTI) Job Ready Tests
11. Oklahoma Vo-Tech
12. SCANS Interactive Prototype
13. SCANS/TEJAS Compendium
14. SkillsUSA Championships
15. Vocational-Technical Education Consortium of the States (V-TECS)
16. WORKING
17. Workplace Success Skills System

A Comparison of Career-Related Assessment Tools/Models

Assessment Tool/Model	Intended Purpose/ Current Uses/ Format	Intended Population	Oregon Career Related Learning Standards Addressed	Relationship to Oregon Academic Content Standards	Relationship to Endorsement Area Frameworks	Evidence of Validity	Evidence of Reliability	Evidence of Fairness/ Appropriateness for Special Populations	Training/ Scoring Guide/ Checklist/ Rating Forms/ Exemplar Task Available	Feasibility	Selection Criteria Met/ Pros - Cons
ACT-WORKKEYS Work Keys tests skills in problem-solving, communication, and teamwork. It also identifies the skill levels needed to do specific jobs. Work Keys is used to: • provide a structure for documenting and improving individuals' workplace skills • identify skills levels employees need for successful job performance • identify individuals with necessary skills • develop or focus training programs • build a foundation for business/education partnerships	Work Keys is a **paper-and-pencil** assessment that shows students their skill levels in eight foundational skills (the skills needed to learn other skills): Applied Mathematics -33 M/C questions -45 min. session Applied Technology -32 M/C questions -45 min. session Listening and Writing -Audio-taped messages -6 written response items -40 min. session Locating Information -38 M/C questions -45 min. session Observation -Videotape of 3 scenarios -36 M/C items -one 25 min. session, -one 35 min. session Reading for Information -33 M/C items -45 min. session Teamwork -Videotape of 12 teamwork scenarios -36 M/C questions -Two 40 min. sessions Test results are sent as individual score reports with levels, not raw scores. Definitions are included for each level. Resource materials are available to assist administrators in determining the proficiency level.	Grades 9-12 (13-17, Adult) Students and workers can document and advance their employability skills. Used by educators to assess basic skills and tailor instructional programs to help students acquire the skills employers need. Used by employers to assess employability skills and develop workers for a wide range of skilled jobs.	Related to CRLS: • *Problem Solving* (Applied Mathematics and Locating Information) • *Teamwork* (Teamwork) • *Communication* (Listening and Writing and Reading for Information) • *Employment Foundations* (Applied Mathematics and Applied Technology)	Related to Academic Content Standards: • *Mathematics* (Applied Mathematics) • *Science* • *Technology* (Applied Technology) • *English* (Listening and Writing; Locating Information; Reading for Information)	Work Keys is not specifically related tot the Endorsement Areas. However, it can be combined with other ACT career interest assessments.	Content Validity Each assessment was developed by "first defining a hierarchical skill scale and then creating test items to be representative of both the skill area and each skill level within that skill area." Construct Validity Interrelations among all Work Keys' assessments Relationship with other (non-Work Key) instruments Relationship between writing prompts and actual work settings	Internal Consistency Applied mathematics, $\alpha = .86$ Applied technology, $\alpha = .80$ Listening, $\alpha = .85$ Locating information, $\alpha = .77$ Observation, $\alpha = .72$ Reading for Information, $\alpha = .80$ Teamwork, $\alpha = .74$ Writing, $\alpha = .89$	Reviewed by an external team of consultants for fairness to racial. ethnic, and gender groups. Statistical analysis of the items to determine whether items function differently for different groups of individuals (DIF analyses). Items that show DIF are eliminated	Listening and Writing assessment scoring guides available. The WorkKeys instructional support component provides instructors, trainers, curriculum developers, and others involved in skills development with assistance in understanding the WorkKeys skills so that they can help individuals improve their workplace skills, whether by integrating these skills into existing courses and programs or by developing additional curricula. ACT provides a two part Resource Guide that lists companies that have developed instructional training for WorkKeys. Work Keys includes sample assessments and explanations of levels to help students become familiar with the types of questions they'll find on the tests.	Prices: Paper-and-Pencil format - $4.00 per assessment Videotape format - $7.00 per assessment Audiotape format: Listening/Writing - $16.00 Listening only - $13.50 Writing only - $12.50 *There is a 15% discount for K-12 school orders for these assessments. Job Profile (identify skills and skill levels for a particular type of job) - $4,000 fee Instructional Guides for skill areas – prices for guides range from $15.00 to $40 for the first set	Pro: Assesses many of the CRLS skills Con: Assesses lower level and basic skills

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Adult Measure of Essential Skills (AMES) (Steck-Vaughn, a Harcourt Publishing Company) AMES was developed by Riverside Publishing in conjunction with Steck-Vaughn. The AMES is an assessment battery with questions tied directly to relevant adult workplace, community, and home experiences. The AMES measures individual strengths and weaknesses in: Reading Communication Computation Applied Problem Solving. This includes score for Critical Thinking and Locating and Using Information.	The AMES is a norm-referenced, multiple-choice battery that consists of five levels. The levels range from Level A (LEP and ESL learners) to Level E (Advanced Literacy Learners). Each level has two forms designed to accommodate pre- and post-testing. The AMES includes items in an untimed format. Level A includes 24 items (32 min.) in Prereading and 6 items (8 min.) in Applied Problem Solving. Level B-E includes items in Reading (34 items/35min.), Communication (32-36items/35min.), Computation (20items/15min.), and Applied Problem Solving (33items/35min.). In less than two hours, one can assess an individual's strengths and weaknesses in: • Functional Skills • Literacy Skills • Problem Solving • Locating/Using Information • Organization/Use of Resources	Grades/Interest Level: Pre K - Adult Subject: Basic Skills; Workplace Competencies; Literacy Norms: • Adult Basic Education • Corrections • Vocational / Technical • 2-Year Community College • Combined Group	Related to CRLS: • *Problem Solving* • *Communication* The AMES Communication test measures: • Prewriting • Identifying and Using References and Resources • Writing and Revising Sentences • Paragraph Content and Organization • Mechanics • Usage • Spelling • Locating and Using Information The AMES Applied Problem Solving test measures: • Numeration • Number Theory • Probability and Statistics/Data Interpretation • Algebra • Measurement • Geometry • Computation in Context • Estimation • Critical Thinking • Locating and Using Information	Related to Academic Content Standards: • *English* The AMES Reading test measures comprehension skills and provides information concerning adults' strengths and weaknesses in locating and recalling information, reading for meaning, reading for critical analysis, and reading and comprehending vocabulary in context. The AMES Computation test measures whole numbers, addition, subtraction, multiplication, division, decimals, fractions, integers, percents, and algebraic operations.	Not specifically related to Endorsement Areas.	Content Validity: A study of the AMES objectives revealed that a wide range of basic skills are covered by the test. AMES measures the skills necessary for adults to function successfully in future educational programs or in the world of work. AMES also reflects current thinking regarding adult literacy and the goals of adult educational programs. The Technical Manual, for use with all levels of the assessment, contains information about validity.	AMES is a norm-referenced assessment The vocational/ technical norming study for AMES consisted of a nationally representative sample from 13 programs from the following subgroups: (1) adult basic education programs (2) correctional facilities (3) two-year community colleges These national subgroup norms allow for an adult examinee's performance from a particular subgroup to be compared with that of a nationally represented sample from that subgroup. Note that vocational/technical norms are not available for Level B of AMES, but are available for Levels C, D, and E. Reliability studies include a standard error of measurement for the AMES test and *p*-values for each item. The Technical Manual, for use with all levels of the assessment, contains additional information about reliability.	Bias Review: Each of the AMES assessments were submitted to a panel of minority educators whose main focus was to review the questions and directions for bias and sensitivity. Reviewers were asked to flag any test items that might in any way show a racial, gender, ethnic, or regional bias. Problematic test questions and/or directions were either revised to remove the potential bias or they were eliminated from the final published AMES assessment. AMES 5 Levels: Level A: Audience: LEP and ESL Learners Level B: Low Literacy Learners Level C: Medium Literacy Learners Level D: High Literacy Learners Level E: Advance Literacy Learners Level A (LEP and ESL Learners) only includes 24 items (32 min.) in Prereading and 6 items (8 min.) in Applied Problem Solving. Other levels also include Reading, Communication, and Computation. ESL component includes a dictated test.	Assessment materials include: • Directions for Administration • Complete Battery (5 levels) • Reusable Locator Test • Two Equivalent forms for pre- and post-testing • Detailed Reports • Hand-scorable, machine-scorable, or Instant-score Answer Sheets	The entire battery can be administered in about two hours. • Locator Test: 20 minutes. • Level A: About 1 hour • Levels B-E: About 2 hours Costs: AMES Complete Battery Assessment Booklets (10 Packs) = $24 Scoring and Reporting Software = $995 Machine-scorable answer sheets (50 Packs) = $35 Instant Score Sheets (50 Packs) = $40 Hand-scorable Answer Sheets (50 Packs) = $32 Scoring Key = $10 Administration Directions = $10 Guide for Interpreting Scores Level A = $4.95 Levels B-E = $12.95	Pro: Includes CRLS Communication and Problem Solving within the context of the workplace. Con: Primarily measures basic literacy skills and problem solving. Communication tests mainly target writing.

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Assessments in Career Education (ACE) (WestEd/CDE) ACE is an end-of-program secondary-level assessment for several California career-technical areas including: • Agricultural Core • Computer Science and Information Systems • Food Service and Hospitality • Technology Core • Health Care Additional assessments are under development for: • Animal Science • Drafting • Marketing	ACE is designed to provide formal recognition to students who "perform outstandingly" in their career-technical program. It is also designed to evaluate local programs and provide feedback for curriculum revision. Current Uses: * State-endorsed Student Recognition * Program Evaluation * STW Evaluation * Perkins Evaluation Assessment components include multiple-choice and written-response items.	Career-technical Students Career-technical Teachers STW partnerships Tech-Prep Programs Academies	Some overlap with CRLS but measured within the context of the career cluster area.	ACE assessments are not structured to report achievement in academic content areas.	Related to Endorsement Areas: * *Business and Management* * *Health Services* * *Industrial and Engineering Systems*	Content validity Committees of content experts were convened to develop and review all tasks and ensure their fidelity to the Model Curriculum Standards on which they are based. Additional review includes members of the community and employers. All CDE assessments are reviewed by a technical advisory committee.	Extensive reliability evidence has been obtained. Internal consistency reliability ranges from $\alpha = .80$ through $\alpha = .90$. Inter-rater reliability for written response items averages around .80 across program areas.	All items are reviewed for ethnic and gender bias. Field test results are reviewed to confirm the review process. Statistical analyses are used to support the committee review process.	Scoring guides: Yes Exemplar tasks: Yes	Costs include item development and recruitment and training of scorers. There are also costs associated with scoring/reporting.	Pro: Addresses all the Endorsement Areas. Con: ACE is a career assessment program for specific career cluster areas. It mainly assesses career technical standards versus career related learning standards.

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Career Portfolio Assessment (CPA) (WestEd) CPA, developed based on the C-TAP model, is a standards-based portfolio assessment of generic workplace readiness standards.	CPA was designed as a formal certification system for career-majors and generic workplace readiness skills, respectively. CPA is currently being used for a variety of purposes including: * Curriculum Revision * Increased career awareness * Interdisciplinary collaboration	Grades 9-12 CPA is used by educators at the school district level and employers.	Significant overlap with the CRLS.	CPA is not structured to report achievement in academic content areas.	When used in conjunction with the C-TAP, all Endorsement Areas can be assessed.	Content validity Committees of content experts were convened to develop and review all tasks and ensure their fidelity to the Career Preparation Standards (CPS) on which they are based.	Scoring inter-rater reliability has been the primary measure; this has been found to range from .69 to .75 when accompanied by substantial formal training. Training time and scorer diversity impact reliability.	CPA has been implemented with diverse student populations. Data are available on group differences. Although CPA is a language based portfolio assessment, the materials and instructions are written in clear simple language.	Scoring guides are included. Samples of student work are included. Training for implementation and scoring is available. For an additional cost, it is also possible to have on-going training throughout the school year.	There are costs associated with teacher training for implementation. Formal scorer training is also needed to understand the scoring process and to increase inter-rater reliability. *Local adaptability:* Entries for the CPA portfolio can be redesigned based on local needs. If materials are tailored to local districts there is additional time and cost involved. There is local flexibility in terms of when and in which grades it is implemented.	Pro: All CRLS are addressed. All Endorsement Areas are addressed when used in conjunction with C-TAP. CPA is adaptable and flexible, it can be modified to fit the needs of individual schools.

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Career-Technical Assessment Program (C-TAP) (WestEd) C-TAP (a standards-based assessment system) is comprised of a Portfolio, Project, and Written Scenario. It is referenced to standards in various career areas, including: * Agriculture * Business * Health Careers * Home Economics * Industrial * Technological Education	C-TAP was designed as a formal certification system for career-majors and generic workplace readiness skills, respectively. C-TAP is currently serving primarily as a teaching and learning tool and as a local assessment in vocational education programs. Current Uses for C-TAP include: * Program Evaluation * Support Whole-school Reform * Curriculum Revision * Student Certification * Increased career awareness * Interdisciplinary collaboration	Grades 9-12 C-TAP is used by educators at the school district and state level, colleges, and employers.	Significant overlap with the CRLS.	C-TAP is not structured to report achievement in academic content areas.	All endorsement areas can be assessed via the C-TAP assessment system.	A Technical Advisory Committee has overseen all development of C-TAP and helped design a series of construct validity studies.	Scoring inter-rater reliability has been the primary measure; this has been found to exceed .7 when accompanied by substantial formal training. Training time and scorer diversity impact reliability.	All C-TAP items are reviewed for ethnic and gender bias. Field test results are reviewed to confirm the review process. Although C-TAP is a language based portfolio assessment, the materials and instructions are written in clear simple language.	Scoring guides are included. Samples of student work are included. Training for implementation and scoring is available. For an additional cost, it is also possible to have on-going training throughout the school year.	There are costs associated with teacher training for implementation. Formal scorer training is also needed to understand the scoring process and to increase inter-rater reliability. *Local adaptability:* Entries for the C-TAP portfolios can be redesigned based on local needs. If materials are tailored to local districts there is additional time and cost involved. There is local flexibility in terms of when and in which grades it is implemented.	Pro: All CRLS and Endorsement Areas are addressed. C-TAP is adaptable and flexible, it can be modified to fit the needs of individual schools. Con: Implementation of all three components is sometimes considered time intensive.

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Career Transcript System (CTS) (SCANS 2000 Center at the Institute for Policy Studies, Johns Hopkins University) The Career Transcript System (CTS) has three components: • Professional Development • Project-based Teaching Tools • Assessment and Certification of Skills. The CTS is a system that documents and certifies a learner's demonstrated ability to: • work in teams • solve complex problems • understand what's needed for quality • use technology • allocate resources • understand systems • acquire, evaluate, and communicate information. Funding to develop the CTS is provided through grants from the National Science Foundation, and the US Departments of Labor and Education.	The Career Transcript System is based on the concept of life-long learning, it is an on-going system designed to assess and certify continuous improvement as individuals attain new and/or higher level skills. The CTS is used for a variety of purposes including: • Portable and on-going transcript of skills acquired • Whole-School Reform • Curriculum Revision • Increased Career Awareness • Interdisciplinary collaboration • Program Evaluation • Impact Outcomes (e.g., attitude change and future plans, attendance, drop out rates, overall performance) The transcript portion of the CTS is internet-based and can be updated on-line; different and multiple measures/assessments can be used in the CTS depending on users' needs; instruction tools include 8 (project-based) interdisciplinary CD-ROM modules. Currently, the CTS system uses the AccuVision Workplace Success Skills System as one of multiple assessment tools.	Grades 9 –12 Adult (community college students and welfare-to-work recipients) Through the CTS, students role-play as new employees, working collaboratively, to solve complex problems. Educators have cross-disciplinary tools based on SCANS that make learning relevant for students with real world contexts. Employers have valid and certified "resumes" that document demonstrated performance of employability skills.	All CRLS are addressed by the Career Transcript System.	Related to Academic Content Standards: • *Mathematics* • *English* • *Science*	Related to Endorsement Areas: • *Health Services* • *Business and Management* • *Industrial and Engineering Systems* • *Arts and Communication*	Content Validity* Committees of content experts were convened to develop, review, and validate all video scenarios to ensure relevance to "real" workplace situations. *Based on current use of Alignmark's Workplace Success Skills System – video-based assessment. *Validity may differ depending on which assessment tool is used in the CTS.*	Internal Consistency* Reliability coefficients for each Module: Module — Coefficient Alpha Interaction Section = .87 Listening Section = .67 Trainability Section = .84 Structuring Work Activities Section = .73 Charts and Tables Section = .88 *Based on current use of Alignmark's Workplace Success Skills System – video-based assessment. *Reliability may differ depending on which assessment tool is used in the CTS.*	The CTS has been implemented with diverse student populations, taking into account ethnic diversity, at-risk students, and schools with high poverty.	Training for faculty and others is available. A professional development opportunity for faculty is offered on the Internet by the Johns Hopkins University titled, *Collaborative and Project-based Learning Using Technology*, which can be taken non-credit or for graduate credit.	There are costs associated with teacher training for implementation. In addition, there are initial costs to set up computer workstations and/or a computer laboratory for students and teachers. For an additional cost, on-site technical support is suggested. *Local adaptability*: Individual schools may choose different and multiple measures, such as paper-and -pencil assessments, performance-based assessments, etc., to be used in the CTS.	Pro: CTS is adaptable and flexible, assesses all CRLS. CTS can be modified to fit the needs of individual schools. The CTS system is currently being piloted in Baltimore City Public High Schools and in community colleges across the country including: • Indian River, FL • Baltimore County, MD • Portland, ME • Long Beach, CA

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Commonwealth Accountability Testing System Practical Living/Vocational Studies (CATS PL/VS) (Kentucky Dept of Education) CATS is the statewide assessment for the state of Kentucky. All students (grades 4 – 12) are tested in a variety of content areas including: Reading, Writing, Mathematics, Science, Social Studies, Arts and Humanities, and **Practical Living/Vocational Studies (PL/VS).** The PL/VS sections, consisting of multiple-choice and written-response items, are assessed in grades 5, 8, and 10.	CATS measures student achievement of the Academic Expectations and the Core Content of Assessment. Combined, these comprise the statewide content standards approved by the Kentucky Board of Education. CATS results are used as part of an overall state accountability formula to reward successful schools and improve deficient ones. Current Uses: * Feedback to students * Curriculum review and revision * School, District, and Statewide Accountability	All students are required to participate in CATS including special education students. IEP-exempt students are required to complete an alternate portfolio based on their education plan.	Extensive overlap with: * *Problem Solving* * *Employment Foundations* * *Career Development* * *Communication (written)*	CATS PL/VS has extensive overlap with all academic content areas, including CIM and CAM expectations, as well as item formats and test structure.	CATS PL/VS is not related to the Endorsement Areas.	Content Validity All test items (M/C and W/R) are developed by the Content Advisory Committees comprised of current Kentucky teachers. All items are reviewed by state content experts to ensure fidelity to the academic expectations and core content of assessment.	Extensive evidence of reliability and generalizability has been obtained over the past eight years. Because of the emphasis on school-level accountability, attention has focused on the reliability of the school-based index. Individual content areas approach α = .90; the overall index exceeds α = .90. The reliability of the scoring of written response items approaches .8.	All items must be reviewed and approved by a bias review committee representing gender, ethnicity, and special education populations.	Scoring guides: Yes Exemplar tasks: Yes	There are high costs associated with item development, pilot tests, bias review, and scoring.	Con: Not explicitly focused on SCANS skills, more geared toward health, safety, hygiene, physical education, and some career preparation

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Comprehensive Adult Student Assessment System - Employability Competency System (CASAS – ECS) The assessment tools identify placement levels into vocational or basic skills training programs, work-related basic skills levels, and job-related reading, writing, computational, and communication tasks. The Employability Competency System (ECS) includes: • Basic Skills Assessment (reading, math, listening) • Certification Test for Employability (Reading, Math) • Pre-Employment/ Work Maturity Checklists • Critical Thinking Assessment for Employability • Oral Communication Applied Performance Appraisal (speaking, listening, reading and writing) • Occupation Specific Tests (auto mechanic, clerical, food service, health occupations)	CASAS – ECS is an assessment system, including standardized multiple-choice, performance-based, and alternative assessment instruments to measure life skills, basic skills, and employability skills. The CASAS assessment system (of which the ECS is a part) addresses: • Life skills • Employment through the ECS and Workforce Learning Systems • Academic subjects for secondary diploma programs • Special education needs • Citizenship • Spanish literacy The CASAS tests measure: • reading comprehension • mathematics skills • listening comprehension • writing • speaking • critical thinking/ problem solving	Youth Adults (skill levels from beginning literacy to high school completion) Employability Competency System (ECS) helps programs identify job readiness and basic skills needed by youth and adults to acquire and keep a job.	Related to CRLS: • *Communication* (communication, listening) • *Problem Solving* (critical thinking)	Related to Academic Content Standards: • *Math* • *English* (reading, writing)	Related to Endorsement Areas: • ***Business and Management*** (clerical occupation specific test) • ***Industrial and Engineering Systems*** (auto mechanic-revised and auto mechanic-Spanish occupation specific tests) • ***Health Services*** (health occupations level B and C occupation specific tests)	Content Validity Test publishers claim that assessments have been validated with both native and non-native speakers of English.	Internal Reliability: The application of Item Response Theory (IRT) to each test item assigns a reliable index of standardized difficulty to each item. Test publishers claim that test forms developed from these items accurately measure basic skills in a functional context.	Training is required for implementation of the ECS system. There are CASAS certified trainers located throughout the country to assist educational agencies, community-based organizations, and business and industry. Trainers help to identify and design appropriate training and select and utilize standardized performance-based and multiple-choice CASAS assessment.	CASAS Basic Skill Levels rubric: • Level A (pre-literacy) • Level B (Beginning Basic Skills and Intermediate Basic Skills) • Level C (Advanced Basic Skills) • Level D (Adult Secondary) • Level E (Advanced Adult Secondary) Various products and services are available through CASAS such as: • TOPSPRO (computerized database designed to automate CASAS scoring, report individual and program results, and more) • Instructional Support Materials (curriculum materials database) • Customized training	There are costs associated with training and assessment materials. Some costs for materials: • ECS Implementation Guide - $60 • Basic Skills Assessment (Reading forms 11-18) set of 10 each - $159 • Basic Skills Assessment (Math forms 11-18) set of 10 each - $159 • Occupation Specific Tests (auto mechanic, clerical, food service, health occupations) - $50 each form • ECS Appraisal Form 130 Starter Kit - $110	Pro: Several assessments from CASAS system are designed for special education and for non-native English speakers Con: Levels may be too low for high school students; assessment very focused on basic skills (beginning literacy and basic math) Used by JTPA, JOBS, School-to-Work, citizenship examination, and correctional programs nationwide.

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Michigan Employability Skills Assessment Kit (Michigan Department of Education) The Employability Skills Assessment Kit (ESAK) was designed by the MDE in response to the Michigan Employability Skills Task Force and the state law requiring schools to support student portfolios from grade 8-12. The ESAK is a comprehensive planning guide designed to involve students in the portfolio process.	The ESAK an interdisciplinary, goal oriented, skill focused, and outcome-based system. Students base their situation on a set of 12 employability skills benchmarks. The benchmarks describe the criteria for achieving these skills. The system provides relevant feedback to students about their work readiness. A team approach for implementing the portfolio process is also described. The suggested steps in portfolio development for employability skills include: • Development Phase: Developing Employability Skills (Introduce Portfolios and Employability Skills; Review Model Portfolios; Create an Exhibit and Analysis as Group Working Together; Train Peer Review Team) • Phase One Assessment: Weighing the Evidence (Evidence Review; Facilitate Student Planning; Peer Review; Prepare Evidence for 12 Benchmarks) • Phase Two Assessment: Reaching the Platform (Benchmark Review; Employer Portfolio Interviews; Exit Interviews; Use of Portfolio for Continuous Improvement) The Employability Skills Assessment Kit is 193 pages. Materials included for the Development Phase, Phase One Assessment, and Phase Two Assessment are described in column 10.	Grades 8-12	*All CRLS are directly or indirectly addressed.* Employability skills defined by the ESAK: Personal Management Employability Skills: • Responsibility • Organization • Flexibility & Initiative • Career Development Teamwork Employability Skills: • Team Communicating • Responsiveness • Contributing • Membership Academic Employability Skills • Communication • Mathematics • Science & Technology • Problem Solving	Academic Content Standards addressed: • *Math* • *English* • *Science* Academic skills defined by the ESAK: • Communication Skills (speaking and listening; writing; reading) • Mathematics Skills (performing basic calculations; reading charts and diagrams; measurement; probability and statistics; estimating costs; etc.) • Science & Technology (using scientific processes; following safety procedures; using computers; knowledge of earth, life, and physical sciences; etc.) • Problem Solving Skills (recognizing, defining, and finding source of problems; selecting solutions; evaluating results; etc.)	No specific relationship to Endorsement Areas, however, the portfolio can be used across career-cluster areas.	Content of the Employability Skills Assessment Kit was developed by Michigan Department of Education Employability Project staff in conjunction with the Benchmark Development Committee. Employers in Michigan have also reviewed the ESAK. Evidence shows that pilot districts have achieved success with the Employability Skills Assessment Kit. Validation in terms of the purpose of the portfolio is clear - extensive records of business involvement in the design and implementation. UCLA CRESST has records of the reactions of employers to early portfolios With the absence of additional funding for the next stages of implementation, the validation process is incomplete.	Reliability information is not yet available. The Employability Skills Assessment Kit has been piloted in numerous school sites throughout Michigan. UCLA CRESST has records of reliability and consistency measures for scoring by teachers. With the absence of funding for the next stages of implementation and incomplete portfolios, additional information on reliability is incomplete.	The pilot sites for the Employability Skills Assessment Kit include a range of schools throughout the state. No statistical basis for differences in fairness. Opportunity to learn – schools eager to adopt the ESAK did more to assist their students in taking advantage of the program. assigned to portfolios.	The materials provided in the ESAK are: Development Phase • Master Guide • Resource Guide • Student Guide • Parent Guide • Employer Brochure • Evidence Sampler • Do It Yourself • Benchmarks • Student Benchmark Guide • Student Evidence Analysis Sheet • Peer Response Sheet Phase 1 • Student Planner • Peer Response Sheet • Teamwork Rating Form • Personal Management Rating Form • Evidence Review Form • Reviewer Guide Phase 2 • Evidence Review Form • Employer Guide • Mapping Resume and College Application • School Profile and Planner • Employability Skills Core Curriculum • Meeting PA 25 Requirements • Central Performance Tasks MDE ran training sessions for implementing portfolios in 1991-2 and began assessment training, for evaluating portfolios as products, in 1994 and 1995. They also assisted some individual local districts with setting up training activities for local assessment.	Local adaptability: The ESAK is intended to be used as a model program which schools can adopt or adapt to their unique needs. Feasibility varies. Small schools found it easiest to implement; some schools were able to adapt materials to their locale while others purchased materials (more costly).	Pro: All CRLS are addressed. ESAK can be adapted to fit the needs of individual schools.

A Comparison of Career-Related Assessment Tools/Models

Assessment Tool/Model	Intended Purpose/ Current Uses/ Format	Intended Population	Oregon Career Related Learning Standards Addressed	Relationship to Oregon Academic Content Standards	Relationship to Endorsement Area Frameworks	Evidence of Validity	Evidence of Reliability	Evidence of Fairness/ Appropriateness for Special Populations	Training/ Scoring Guide/ Checklist/ Rating Forms/ Exemplar Task Available	Feasibility	Selection Criteria Met/ Pros - Cons
National Occupational Competency Testing Institute (NOCTI) - Job Ready Tests The National Occupational Competency Testing Institute was formed in 1973 by a consortium of states. NOCTI offers over 150 different technical tests that have been nationally validated to reflect entry level and experienced worker skills. NOCTI has a vast item/job bank resource in specific trade areas that can be used for assessment. Clients must first provide a task/competency list for the occupational area they want to assess. NOCTI Job Ready level assessments are designed to support educational and training programs based on industry standards	NOCTI assessment instruments are designed to evaluate occupational competency. Most NOCTI assessments include a written and a performance portion to assess theoretical concepts, as well as manipulative skills required. NOCTI assessments are constructed by skilled technicians, career and technical educators, and test development specialists. They are continually reviewed and updated to reflect new technologies, job titles, and National Standards.	NOCTI has developed competency assessments for a wide range of clients including education, business, industry, government and the military. NOCTI tests are used by worker-level or equivalent individuals experienced in skilled trades or occupations who need to present objective evidence of their competence. The **Job Ready** tests are intended for student testing. They are developed for students who have completed a 2 year vocational program and need to be tested in an occupational setting.	Some overlap with CRLS but measured within the context of a specific occupation.	NOCTI assessments are not structured to report achievement in academic content areas.	NOCTI trade areas overlap with all Endorsement Areas.	Content Validity: Each item on the Job Ready test is linked back to a job/task analysis. The job/task analysis is conducted by subject matter experts. The importance of each occupational skill is weighted. Once a test has been revised or a new test title is introduced, NOCTI must first pilot the test to establish national normative data before releasing it into our standardized battery of tests. All of NOCTI tests are involved in a revision cycle and are updated as technology changes. If needed, NOCTI will conduct a one-day cut score determination procedure to develop valid, defensible cut scores. This process includes test data analysis with a study of differential impact. Cost = $2,000 per assessment title	Reliability studies include item analysis. Alpha = KR20	NOCTI will provide review of assessment items and materials, using national accepted standards, to check for bias and prejudicial language/terminology. Cost = $2,000 per assessment title NOCTI will determine the reading level of the assessment as applied to the expected reading ability of the occupation to be assessed. Cost = $2.50/item NOCTI offers a development package for customizing assessments to meet particular skills assessment needs. This package includes one Job Task Analysis Workshop, Written and Performance Assessment Development, Pilot Testing, Item Analysis, Bias Review, Readability and Score Reporting Services. Cost of the Development Package is $15,000 plus travel expenses.	Off the shelf Job Ready assessment materials include: • Test booklet (Job Ready Written Assessment + Performance Assessment) • Scantron sheet • Mailing label • Coordinator sheet • Administration Manual • Samples of Tasks • Scanning/Scoring services by NOCTI Customized assessment scoring services are also available. NOCTI offers a host of on-site workshops to help you establish and maintain the assessment program. A few of these special workshops are: • Establishing an effective testing program • Using diagnostic test results • Creating an effective evaluation model for tech-prep and school-to-work • Training performance test administrators • Crafting an in-plant skills certification program • Setting quality standards (Cost = $2,000 per workshop)	Cost: Job Ready student assessment = $15.00 complete. This price includes both the written and the performance part of each assessment, instructions for administration, scoring and reporting services and certificates of completion, if applicable. Score reports are mailed back within 24hours of receipt. Score reports can be faxed upon request. Scoring services for customized assessments = $30 complete. Administration: For the written assessment, it is suggested that each participant be given a workstation with a personal computer and a printer. Performance assessments are administered to small groups under close supervision. Third party evaluators are recommended to ensure the validity of test results.	Pro: Used by a number of states. Customized assessment development is available. Con: Customized assessment development is costly. Off the shelf NOCTI assessments are occupation specific.

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Oklahoma Vo-Tech (Oklahoma Department of Vocational – Technical Education Competency-Based Testing Program) The Oklahoma competency-based testing program consists of assessments that test the competency attainment of students in both comprehensive high school vocational programs and vocational technical centers.	Vo-Tech encompasses a range of criterion-referenced multiple-choice tests for 93 occupations in 32 program areas (e.g., child care, automotive, horticulture). The testing system as a whole is used to achieve two objectives: • Program improvement and accountability at the state level (providing data) for the occupational competency attainment measure in the state's performance measures and standards). • Improvement in instruction and student learning through competency-based curriculum and assessment. In some occupational areas, testing has a third purpose: certifying that students have attained competencies for employment purposes.	Grades 11-12 Adult (post-secondary)	Vo-Tech does not specifically address the CRLS. Career-related skills are taught and evaluated in the program, but are not formally assessed in the Vo-Tech multiple-choice tests.	Vo-Tech is not specifically related to academic content standards. The tests assess applied academics in occupationally-specific contexts, but not address academic content standards in the multiple-choice tests.	Related to all Endorsement Areas: • *Health Services* (Health Certification Project) • *Industrial and Engineering Systems* (Associated General Contractors National Certification) • *Business and Management*	Content Validity Advisory committees (comprised of representatives from labor, higher education, secondary faculty, and industry) have been established for each program area to create duty/task lists to rank tasks by importance. Task lists are thoroughly reviewed every three years. Questions are written using these lists and are stored in a secure test bank. State staff randomly select test items to develop the annual written tests, which require a minimum score of 70 percent for passing.	Internal Consistency: The State has a set co-efficient to use for internal consistency in testing. State staff and committees believe that scores on the multiple-choice test are closely linked to job performance.	Each year, state staff conduct item analyses on each multiple-choice test question to look for questions that are too difficult or that show gender or racial/ethnic bias.	Testing liaisons are trained in the areas of objectivity, test security, and administration. State staff work with educators who train student teachers, so student teachers are familiar with the curriculum guides and tests before they become teachers.	Test length: can range from 30 – 80 questions depending on occupational area and amount of training student receives. Instructors decide when students are ready to take the tests. Some schools offer a "Competency Certificate" for those who successfully complete the program and pass the test(s). There are high costs associated with item development, pilot tests, bias review, and scoring.	Pro: Certifies students' occupationally specific skills Con: This system may be difficult to replicate

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SCANS Interactive Prototype (LexIcon Systems) To teach SCANS skills, LexIcon Systems (a Vermont-based multimedia developer) received a grant from the US Department of Education (September, 1998) to create an interactive CD-ROM and fully interactive version that can be accessed from the World Wide Web. This was the result of a Phase 1 (Proof of Concept) grant by USDE. A grant for Phase 2 was awarded September 1, 1999. Phase 2 is a two year grant to expand the SCANS Interactive Web-site.	This project was developed out of the belief that the most effective way of learning skills is "in context" teaching learning objectives within a real environment and that the SCANS foundation and competencies be taught and understood in an integrated fashion that reflects the workplace contexts in which they are applied. What users experience: After the introductory material users find themselves at a desk. In front of them is their desk tools, to their left is their computer, and to their right they have some reference books. Their phone is already ringing. In the course of their work day they will help out a customer with a missing item, correct invoices, and do an analysis of error rates in the order-processing department. In the course of doing these tasks they will use E-mail, answer phones, use a calculator, draw bar charts, and use a computer--often doing more than one things at a time. They will have to set priorities, work to a schedule, and balance multiple tasks. In short, they will experience the SCANS skills within a workplace context.	Age 15 - Adult	On-line instructional program teaches all SCANS skills which overlap with the CRLS.	Some academic skills are addressed while students are engaged in an interactive work environment: Related to the Academic Content Standards: • *Mathematics* • *English*	Mainly relevant to the business industry. Related to the Endorsement Area: • *Business and Management*	Validity information is inconclusive. This was a six-month project funded by the US Dept. of Education that culminated into a prototype. The prototype was tested in a number of sites across the country. Sites ranged from adult learning sites, workplace sites, vocational programs, and high schools.	Reliability information is inconclusive. The SCANS Interactive Prototype is a test-bed for ideas, not a completed product.	Access to a computer is necessary. Includes visuals and basic language. Built in to the tasks are help systems and tutorials.	The SCANS prototype is located on-line at: http://www.lexicons ys.com/SCANS_pro totype.html	Access to a computer and Shockwave software is necessary.	Con: Instructional material, not an assessment. Assessment may be built into Phase 2 of this project.

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SCANS/TEJAS Compendium (Richland College, Texas) Located at: http://www.rlc.dccc d.edu/annex/id/scan s/htm The SCANS/TEJAS Compendium contains a large test bank and eight learning modules. The test bank items assess all SCANS skills. It consists of two sections. One contains over 400 cognitive assessment test items and the other contains over 400 affective domain assessment criteria. The learning modules are self-contained instructional packages, which are not subject-matter specific (i.e., engineering, automotive, or nursing) that can be adapted to any curriculum.	The SCANS/TEJAS tests are multiple-choice, true/false, and do/don't lists. The tests can be used to assess what individuals know (cognitive domain), as well as what they do and value (affective domain), about SCANS skills. The learning modules can be used to help individuals increase their knowledge and improve their attitudes concerning SCANS skills. The eight learning modules are: • Allocating Money Resources • Applying Systems Knowledge • Applying Technology • Displaying Integrity and Honesty • Exhibiting Decision-Making Skills • Exhibiting Listening Skills • Negotiating Conflict Resolution • Organizing Information Each module can take 2 – 3 hours to complete.	Adults (community college students) High school students Used by faculty to enrich student learning and to provide remediation based on results from SCANS/TEJAS tests. Used by counselors to assess which employability skills students have and are in need of improving.	Related to CRLS: • *Personal Management* • *Problem Solving* • *Teamwork* • *Communication* • *Organizations and Systems*	SCANS/TEJAS tests and learning modules can be used in conjunction with all academic content standards.	SCANS/TEJAS tests and learning modules can be used in conjunction with all endorsement area frameworks.	Content Validity: Committees of content experts were convened to develop and review all tasks and ensure they were pedagogically sound test items related to each of the SCANS competencies.	An item analysis was conducted for each item. No other information about reliability is available.	Assessment items and learning modules are written at the eighth grade reading level.	Training is available. Users can "cut and paste" from the test bank to customize assessments to meet different needs.	Cost: $30 test bank and modules for individual use $100 site license to use all materials There is an additional cost for training. Time: Each learning module takes about 2 – 3 hours to complete. Assessment time varies depending on how many questions are chosen by test administrator.	Pro: users have flexibility in creating different assessments from existing test bank Con: Assessment does not include any performance-based measures

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SkillsUSA Championships (Vocational/ Industrial Clubs of America (VICA)) The SkillsUSA Championships cover a broad range of vocational fields, test generic and job-specific skills and use several forms of assessment Two types of contests are: • Job skills contests where individuals compete in performing job-related skills and applying relevant knowledge from vocational field they are studying • Leadership development contests which assess demonstration of generic and employment-readiness skills.	The purpose of contests is to document students' skill mastery, encourage excellence, and increase the competence of entry-level workers. Indirectly, VICA aims to improve instruction and curriculum. In many contest areas, a written exam is included; items are usually multiple choice, but sometimes are constructed response. Winners are determined by the total scores on all components, or contest stations, from all judges. The contests are judged using criterion-referenced scoring. In most cases, contests combine objective questions that have a single right answer (e.g., multiple choice, yes/no, or mathematical question) with aesthetic or subjective judgments (e.g., in cosmetology, advertising design, culinary arts) about student progress. In some cases, points are awarded for overall quality of a product, introducing a holistic element to the scores.	Grades 9-12 Adults	All CRLS are addressed in the SkillsUSA Championships	Related to Academic Content Standards: • *Mathematics* • *Science* • *English* • *Arts*	Related to Endorsement Areas: • *Industrial and Engineering Systems* (Electronic Products Servicing and Precision Machining Technology) • *Arts and Communication* (Advertising Design/ Commercial Art) • *Health Services* (Practical Nursing) • *Business and Management* (Job Skills Demonstration in Leadership Development contests)	<u>Content Validity</u> Corporate leaders and practitioners from over sixty fields convene to develop the tests, which are designed to measure skills required in those fields to be relevant anywhere in the nation.	Judges are given objective criteria to use in making decisions about correctness of responses or performances. In cases where subjective judgment enters into the score, there is probably more variation among the judges' scores. However, these differences likely even out in the total scores. To encourage consistency in judging, new judges are put on a team with experienced judges; the new judge's work is carefully monitored by the experienced judges.	It is not likely that a person's gender or race/ethnicity to influence expert judges of the job skills tests, because many judges fill out the scoring sheets for the products after contestants have departed.	The specific content of tests is changed every year, though most of the subject material covered remains consistent from one year to the next. Teachers can obtain tests from previous years for use in their classrooms.	There are high costs related to putting together a national competition such as costs for equipment, materials, and facilities; labor for contest design, setup, judging, and breakdown; and personal transportation to the conference site.	Pro: Nationally recognized competition, sponsored and endorsed by many in industry Con: Can be costly and difficult to replicate the design and participation by industry

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Vocational-Technical Education Consortium of the States (V-TECS) The V-TECS consortium (25yrs.) is a partnership made up of business/industry, education, and military branches to develop curriculum standards, and assessment products based on specific industry requirements. V-TECS products provide opportunities for preparation of instructional models for a wide range of occupations. Occupational Analysis Information includes: *Duty/Task List *Tool, Equipment, and Work Aids List *Performance Objectives *Performance Steps *Enabling Competencies *Related Academic Skills *Instructional Activities * Resources and Worksheets *Criterion-Referenced Test Item Banks	V-TECS DIRECT is a Windows-based software package designed to manage occupational analysis information. Workplace Skills, a special edition of V-TECS DIRECT 4+ is scheduled for release November, 1999. V-TECS Connect is also a Windows-based software. The package includes over 70 tasklists designed to facilitate the management of work-based learning experiences. It is distributed on CD-ROM. The following products are available in hardcopy format: * V-TECS Catalogs include a Task List, Tool, Equipment, and Work Aids List, Performance Objective, (which includes the Standard of Performance) and Performance Steps--all validated by workers in the occupations. *A new catalog for "Workplace Skills" was developed in 1994.* * V-TECS Curriculum Guides include units of instruction that complement the V-TECS catalogs. They include some or all of the following elements: suggested Instructional Activities and Resources, Enabling Competencies, and Related Academic Skills for each tasks. Guides are developed by instructors and workers in the occupation. * V-TECS Product Elements combine the Elements in V-TECS Catalogs and Curriculum Guides.	V-TECS products and the V-TECS DIRECT software system are used by people who educate and train individuals in public and private, postsecondary and secondary, business and industry settings. V-TECS materials assist in: * organizing and reorganizing technical courses and programs * identifying tools, equipment, and materials for levels of instruction * revising program curriculum * identifying academic requirements for specific occupations * organizing and applying work-related activities in academic classes * articulating skills at the secondary and post-secondary levels * developing assessment instruments to assess student performance and knowledge	CRLS are addressed within the context of an occupation.	Academics related to specific occupational areas are addressed.	V-TECS addresses a wide variety of occupations that relate to the Endorsement Areas.	V-TECS materials are validated with business/industry incumbents. Traditionally, a writing team of workers from the occupation under analysis develops a task list for a survey of a larger number of workers. The writing team is enlarged to include subject matter instructors for developing instructional elements and test item banks. Additional evidence of validity is included in technical reports.	V-TECS products have been used for twenty-five years. Evidence of reliability of these products over the years is included in technical reports.	Some V-TECS products are available in special formats to accommodate various populations.	On-Site and Users Group Training for V-TECS DIRECT 4 and V-TECS CONNECT: <u>On-Site Training:</u> Member Price: $450 per day plus trainer expenses and lab costs Non-Member Price: $500 flat fee plus $450 per day plus trainer expenses and lab costs <u>Users Group Training:</u> (includes free software updates and technical assistance) Member Price: $350.00 each site Non-Member Price: $700.00 each site **<u>Webtester</u>** For interest in V-TECS on the World-Wide-Web, contact www.Webtester.com. Webtester is a project that has assisted states in putting various V-TECS exams on the World-Wide-Web. These are multiple choice knowledge-based tests versus performance tests.	<u>V-TECS DIRECT 4+</u> (CD-ROM with Software and Over 70 Occupations) Non-Members Price: $1,950.00 each site Member Price per site: 1-5 sites = $975.00 6 - 15 Sites = $875.00 16 - 30 Sites = $780.00 31 - 50 Sites = $680.00 Over 50 Sites = $475.00 <u>V-TECS Connect</u> Non-Member Price: $790.00 each site Member Price per site: 1 - 12 Sites = $395.00 13 - 25 Sites = $320.00 Over 25 Sites = $245.00 Member Price per site (with purchase of V-TECS DIRECT 4) 1 - 12 Sites = $295.00 13 – 25 Sites = $220.00 Over 25 Sites = $145.00 Prices for V-TECS hard copy products range in price from $25-$80 for non-members to $8-$32 for members. V-TECS Test Bank items are available through V-TECS headquarters: 1866 Southern Lane, Decatur, GA 30033-4097 (800-248-7701 ext.543)	Pro: Numerous states are a part of V-TECS Con: V-TECS is primarily focused on specific occupations. Member states and agencies: *Arizona *Arkansas *Georgia *Hawaii *Idaho *Illinois *Indiana *Maine *Maryland *Minnesota *New Jersey *Oklahoma *Pennsylvania *South Carolina *Virginia *Wyoming *U.S. Air Force *U.S. Army *U.S. Marine Corps *U.S. Navy *U.S. Bureau of Prisons *U.S. Dept of Labor

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WORKING (H&H Publishing Company, Inc.) WORKING is a diagnostic and prescriptive instrument that measures basic workplace interests, skills, habits, and styles. It is intended to help students assess themselves on nine characteristics related to career success.	WORKING is a paper and pencil instrument designed to assess the following nine characteristics: • Taking Responsibility • Working in Teams • Persisting • Having a Sense of Quality • Interest in Life-Long Learning • Adapting to Change • Solving Problems • Information Processing • Thinking in Terms of Systems Each assessment includes a scoring guide in a sealed envelope which may be used by students for self-scoring. WORKING is intended to provide information to the individual being assessed and give teachers and trainers a framework within which they can develop instructional activities. Examples of how the results are used: • School to Work/Tech Prep • Career planning/placement • Academic coursework • Personal guidance • Apprenticeship placements • Work study student training • Pre-employment training	WORKING is intended for use in college, high school, and workplace settings. WORKING is normed for college students but applicable to high school and workplace settings.	General overlap with SCANS skills and CRLS. Related to CRLS: • *Personal Management* • *Problem Solving* • *Teamwork* • *Communication* • *Organization & Systems* • *Employment Foundations* • *Career Development*	Does not specifically address academic content standards.	Not specifically related to the Endorsement Areas.	Claimed to be statistically valid and reliable. Statistical analysis was conducted to determine which items of Working were the strongest predictors – this analysis led to reduction in the number of items from 85 to the final 50-item scales of Working.	Claimed to be statistically reliable. This assessment was normed for college but is applicable to high school. The college-based study included 16 colleges in 11 states.	Materials are written in basic language. Eleven states were included in their study.	Includes a scoring guide in a sealed envelope at the end of the assessment. This can also be used by students as a tool for self-assessment. Training does not generally accompany the assessment. The Users Manual includes directions for those administering the assessment, a history of the instrument's development, and possible uses for WORKING. A Workplace Applications Manual is available upon request. This includes suggested activities for developing career-related skills at a particular work site. It includes information on readiness and improvement programs, orientations, and apprenticeships.	Less than 30 minutes to administer the 50 questions. Prices for WORKING: 1 - 99 = $4.00 each 100 + = $3.50 each Each assessment includes the instrument, scoring guide, and score interpretation information. A User's Manual is also provided with each order.	Pro: Generally related to the CRLS and SCANS. Con: Basic assessment. Normed for college students but applicable to high school.

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Workplace Success Skills System (AccuVision, AlignMark) Workplace Success Skills (WSS) measures the following skills: * Interacting with others * Listening * Trainability * Structuring work activities * Graphs and charts The *Skill Ranking* provides a definition of each of the skills measured and ranks participant's performance in each skill from strongest to the weakest. The *Skill and Task Analysis* provides an analysis of the tasks that comprise each of the skills assessed by the system. Each task is reported as either acceptable or needing development. The *Performance Development Strategies* are prescriptive on-the-job developmental activities to improve development.	The WSS is a modularized, video-based job simulations with multiple-choice paper and pencil assessment which are scored by computer. There are 5 modules in the WSS: Interacting with Others 1 hour, 15 minutes 10 work situations with 2 video segments (5 responses per situation) Listening 20 minutes 2 video segments (22 questions) Structuring Work Activities 12 minutes 1 video segment (9 items to arrange in proper order) Trainability 23 minutes 1 video segment (delivered in a classroom setting) (10 questions) Graphs and Charts 29 minutes (24 questions)	Students (9-12) Adults (pre-supervisory employees)	Related to CRLS: * *Personal Management* (Structuring Work Activities; Trainability) * *Problem Solving* (embedded in Interacting with Others; Listening) * *Teamwork* (Interacting with Others) * *Communication* (Interacting with Others; Listening)	Related to Academic Content Standards: * *Mathematics* (Graphs and charts)	No direct relationship to endorsement areas.	Content Validity Committees of content experts were convened to develop, review, and validate all video scenarios to ensure relevance to "real" workplace situations. A concurrent validation study was designed to demonstrate the degree of correlation between incumbents' (sample size = 663) test scores on all five modules and their current on-the-job performance. Better on-the-job performers were expected to score higher on the test than lower performers. Predictive validity The WSS claims "high correlation between assessment scores and job performance" Used by some employers to determine hiring decisions (legally defensible).	Internal Reliability Co-efficient alpha was calculated for each section of the test. Reliability coefficients for each Module: Module — Coefficient Alpha Interaction Section = .87 Listening Section = .67 Trainability Section = .84 Structuring Work Activities Section = .73 Charts and Tables Section = .88	The WSS has been implemented with diverse populations. Reading ability does not inappropriately influence the measurement of key competencies. The WSS was developed using professional practices which are consistent with standards promulgated by the Equal Employment Opportunity Commission, the American Psychological Association, and the Americans with Disabilities Act	Training is not required to use the program.	There are costs associated with the equipment needed, such as a VCR/TV, videos, PC computer with modem, paper and pencil. The assessment takes about 2.5 hours to complete video and consists of 5 modules. Costs: Administrative Kit - $350 Price per report for: 25-99 scores - $25 100-199 scores - $22.50	Pro: Identifies developmental needs Con: Not specifically designed for students, more geared toward employees/ workers

INTEREST AND APTITUDE INVENTORIES

1. ACT-Career Planning Survey
2. ACT-PLAN
3. Campbell Interest and Skill Survey
4. Career Scope
5. Hall Occupational Orientation Inventories
6. JOB-O
7. Strong-Campbell Interest Inventory
8. Vocational Research Interest Inventory (VRII)

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ACT-Career Planning Survey The Career Planning Survey is designed to prepare students (grades 8-10) to make informed education and career decisions to prepare students for a positive transition to work or further education after high school. The Career Planning Survey provides information that reflects current career development theory and career guidance needs, and helps students develop personal plans, set career goals and plan a program of studies to achieve those goals.	The Career Planning Survey includes: (1) Two Academic Ability Tests covering Reading and Numerical Skills to help students understand the importance of these two abilities in all occupations. Results are nationally normed by grade level. (2) An Inventory of Work-Relevant Abilities to help students rate themselves in 15 work-relevant ability areas, many of which are not assessed by tests. The inventory provides scores on six scales corresponding to six career clusters - Business Contact, Business Operations, Technical, Science, Arts, and Social Service. (3) The Unisex Edition of the ACT Interest Inventory (UNIACT) assesses student likes and dislikes for 90 common activities. UNIACT provides scores for the above six career clusters. (4) Scores from the UNIACT and the Inventory of Work-Relevant Abilities are linked to the World-of-Work Map, which locates career fields according to their involvement with data, ideas, people, and things.	Students in grades 8-10	Includes an inventory of Work-Relevant Abilities and a World-of-Work Map, which locates career fields according to their involvement with data, ideas, people, and things. Related to CRLS: * *Career Development* * *Organizations and Systems*	Includes Academic Ability Tests covering Reading and Numerical Skills Related to Academic Content Standards: * *Math* * *English*	Academic Ability Tests attempts to connect the importance of academic skills to all occupations Inventory of Work-Relevant Abilities and UNIACT address six career clusters - Business Contact, Business Operations, Technical, Science, Arts, and Social Service Related to Endorsement Areas: * *Business and Management* * *Arts and Communications* * *Natural Resource Systems* * *Industrial and Engineering Systems*	Tool is claimed to be valid. The ACT Fairness report provides information on item development and review, pre-testing of items, operational forms construction, and test form analysis.	Tool is claimed to be reliable. The ACT Fairness report provides information on reliability. Literature indicates that the Career Planning Survey provides reliable information that reflects current career development theory and career guidance needs.	The ACT Fairness report for this assessment contains information about group and gender representation. Items were judged not to be biased. Guidelines for eliminating unfair tests include (1) Fair Portrayal, (2) Fairness in Language, and (3) Cultural Diversity. Materials are written at a basic reading level.	Guidebook includes checklists, experience inventories, coursework planner, job family charts, world-of-work map to assist students in career planning.	Interest and aptitude inventories plus abilities test for reading and numerical skills: 1-499 - $3.60 each 5-1999 - $3.35 each 2,000+ - $3.10 each Interest and aptitude inventories only: 1-499 - $3.05 each 5-1999 - $2.80 each 2,000+ - $2.60 each	Con: The Career Planning Survey is more of a career guidance program than an assessment.

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ACT-PLAN PLAN is essentially the 10th grade version of the ACT college-bound assessment. It is an educational track test that primarily focuses on academic skills. PLAN is a comprehensive guidance resource that helps students measure their current academic development, explore career/training options, and make plans for the remaining years of high school and post-graduation years. PLAN is intended to stimulate thinking and planning for life after high school, assess academic preparation for post secondary education, support high school course selection for junior and senior years, relate personal characteristics to educational and career options, help focus test preparation to improve ACT scores, and provides an estimated ACT Assessment composite score.	The purpose of PLAN is to help tenth graders build a solid foundation for future academic and career success and provide information needed to address school districts' high-priority issues. PLAN includes Achievement Tests in: • English • Mathematics • Reading • Science Reasoning Non-Academic Sections: • Interest Inventory • High School Course Information • Educational/Occupational Plans • Needs Assessment Profile The Educational Planning and Assessment System (EPAS) is an assessment system available through ACT that includes Explore (an 8th grade test similar to PLAN), PLAN (10th grade), ACT Assessment (college bound), and Work Keys.	PLAN is typically administered in the fall of the sophomore year. PLAN is intended for students who are college-bound as well as those who are likely to enter the workforce directly after high school.	Related to CRLS: • *Problem Solving* (science reasoning) • *Communication* (reading) • *Career Development* (Educational/Occupational Plans)	Achievement Tests in English, Mathematics, Reading, and Science Reasoning Related to Academic Content Standards: • *Mathematics* • *English* • *Science*	Not specifically related to Endorsement Areas.	Tool is claimed to be valid, comparable to the ACT college bound assessment. The ACT Fairness report provides information on item development and review, pre-testing of items, operational forms construction, and test form analysis.	Tool is claimed to be reliable, comparable to the ACT college bound assessment. The ACT Fairness report provides information on reliability. PLAN is normed for sophomores in high school.	The ACT Fairness report for this assessment contains information about group and gender representation. Items were judged not to be biased. Guidelines for eliminating unfair tests include (1) Fair Portrayal, (2) Fairness in Language, and (3) Cultural Diversity.	Materials available include: • PLAN test booklets • Guide for Using Your PLAN Results • Planning Guide for Students and Parents • Descriptions of the Skills and Knowledge Associated with PLAN and ACT Assessment Scores	3 ½ hours to completed the entire assessment. Testing window is between September 25th and December 4th.	Pro: Includes academic achievement tests in English, Math, Reading, and Science Reasoning. Con: The ACT-PLAN is mainly an interest inventory that helps students plan career goals. It is not an assessment of career-related skills.

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Campbell Interest and Skill Survey (National Computing Systems) Located at: http://assessments.ncs.com/assessments/tests/ciss.htm The Campbell Interest and Skill Survey (CISS) measures self-reported vocational interests and skills. CISS test includes interest scales that help assess an individual's attraction to specific occupational areas and provide a comparison to people who are happily and successfully employed in those fields. Occupational orientations generally correspond to the major subsets of the work world: • Influencing • Organizing • Helping • Creating • Analyzing • Producing • Adventuring.	The purposes of the CISS are: • Exploring new avenues in career development. • Pinpointing areas of academic study that can build skills and, as a result, increase career options. • Helping individuals seeking personal counseling to find occupations or vocations that help meet their psychological needs. • Assisting employees who have been displaced by organizational restructuring and are faced with a job transition. The CISS includes interest and skill scores for seven Orientation Scales, 29 Basic Scales, and 60 Occupational Scales.	The CISS instrument focuses on careers that require post-secondary education and is most appropriate for use with individuals who are college bound or college educated.	Related to CRLS: • *Communication* • *Organization/ Systems*:	Related to Academic Content Standards: • *Math* • *Science*	Related to Endorsement Areas: • *Arts and Communications* Creating: Art/Design, Performing Arts, Writing, International Activities, Fashion, Culinary Arts • *Industrial and Engineering Systems* Analyzing: Mathematics, Science • *Human Resources* Influencing; Leadership, Law/Politics, Public Speaking, Sales, Advertising/ Marketing	Validity: The median Validity Index over all 58 Occupational Scales was 1.97 for the interest scales and 1.82 for the skill scales, indicated the average CISS Occupational Scale produces about two standard deviations difference between "workers in the occupation" and "workers not in the occupation." The individual items on each scale discriminate by about one-half standard deviation each between the occupational sample and criterion sample. The mean scores of other occupations on each Occupational Scale look meaningful, according to the publisher's technical manual.	Internal Consistency: (Alpha) Coefficients for the Orientation Scales*: Interest Skill Influencing .89 .89 Organizing .88 .84 Helping .86 .81 Creating .82 .76 Analyzing .93 .87 Producing .87 .89 Adventuring.86 .87 *Calculated on diverse sample of employed adults (N=4,842) Median Interest Alpha Coefficient = .87 Median Skill Alpha Coefficient = .87 Test-Retest Correlations: A test-retest sample was generated by using members of the occupational criterion samples. These individuals spread over 54 occupations. The median correlations for interest and skill scales were .87 and .81 respectively.	Reading level: 6th grade –Administration Time: Approximately 35 minutes to complete Assessment Length: 320 items with 6-point rating scales Norms for the CISS survey are based upon a sample of 5,225 employed men and women representing a wide array of occupations and ethnic backgrounds.	Training is not required. Mail-In scoring services are available. CISS tests are translated into Spanish.	Costs: Administration materials: Manual - $25.75 50 worksheets - $10.25 Individual Profile Reports - $7 each Mail-In Scoring Service – $8.50	Con: More of an interest inventory than an assessment for skills.

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Career Scope (Vocational Research Institute) Career Scope is a self-administered computerized career assessment and reporting system that measures both aptitude and interest. It includes the essential components of VRI's product "Apticom" which was developed as a computerized career assessment system for special populations in 1982. CareerScope includes two parts: an interest inventory and an aptitude test. The aptitude test is timed to include speed screening while the Interest Inventory is not. The entire assessment should take one hour to complete. The results of Career Scope are intended to assist individuals in choosing an appropriate and meaningful career or course of study.	CareerScope is software that may be used on a PC or over a network (Windows® or Macintosh®) to provide a battery of self-administered career interest and aptitude tests. The Interest Inventory measures and identifies a user's attraction to careers that correspond to the U.S. Department of Labor's Interest Areas. These areas are: • Artistic • Plants/Animals • Mechanical • Business Detail • Accommodating • Lead/Influence • Scientific • Protective •Industrial • Selling • Humanitarian • Physical Performing (The results from the Interest Inventory are compiled into a comprehensive Individual Profile Analysis (IPA). The IPA objectively identifies each evaluee's most significant interest area preferences.) Critical aptitudes measured by CareerScope: • General Learning Ability • Verbal Aptitude • Numerical Aptitude • Spatial Aptitude • Form Perception • Clerical Perception	Designed for use by middle school students, high school students, career/guidance counselors, and colleges. External evaluations claim that the tool is valid and reliable. *Report being sent.*	Includes aptitude and interest area tests that are somewhat relevant to CRLS. Related to CRLS: • *Problem Solving* • *Communication*	Includes aptitude and interest area tests that are somewhat related to Oregon's core academic skills. Related to Academic Content Standards: • *Mathematics* • *English* • *Science* • *Social Science* • *The Arts*	Related to Endorsement Areas: • *Natural Resource Systems* • *Human Resources* • *Business and Management* • *Industrial and Engineering Systems* • *Arts and Communications*	External evaluations claim that the tool is valid and reliable. *Report being sent.* CareerScope's career recommendations and score reports are based upon standards set by the U.S. Department of Labor. Validity is claimed to be .6 to .9 depending on the factor being tested.	External evaluations claim that the tool is valid and reliable. *Report being sent.* Normed to a variety of populations Reliability is claimed to be 80-90%.	Appropriate for general high school population down to a 4th grade reading level. VRI offers comparable assessment services, APTICOM and VITAS, for special populations. These are generally administered to individuals or small groups. APTICOM was designed to test aptitudes and interest of special populations such as people in rehabilitation programs, welfare to work programs, at-risk youth, etc. VITAS includes a series of simulated workplace tasks. It was designed as a tool for behavior observation and focuses on interests, temperaments, aptitudes, and basic workplace skills.	Scoring/reporting of the CareerScope assessment is immediate. Results are printed when the assessment is complete. Local sites are trained on how to use the system, interpret guidelines, and understand score reports. A detailed users manual is also included in the software package. There are no costs associated with initial set up and training – usually ½ day. Local VRI representatives are available at a negotiable cost for follow up training.	The entire assessment process takes 60 minutes or less to complete. Requires the use of at least one computer. Schools typically purchase the software for one or more computers in their school computer labs. The cost for one computer to be set up with CareerScope software is $3,000. This includes set up, initial training, and unlimited testing. There is also an optional maintenance and software update service for $500. Costs are on a sliding scale based on the number of computers used.	Pro: Takes 60 minutes or less to complete. Reporting is immediate. Con: This is mainly a general aptitude and interest inventory test.

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Hall Occupational Orientation Inventories (Scholastic Testing Service, Inc.) http://www.sistesting.com/COUNSEL.shtml The Hall Inventory has four forms which include: • Intermediate Form • Young Adult/ College Form • Adult Basic Form • Form II. The following components are used with the four forms: • Interpretative Folders • Career Education Reader • Counselor's Manual	The Hall Inventory is a paper-and-pencil self-administered and self-scored instrument. The purpose of the Hall Inventory is to enable teachers or counselors to help students develop self-examination and self-awareness skills, provide meaningful content areas for self-examination, clarification, and expansion, and provide the opportunity and assistance for students to develop independent decision-making skills. **Young Adult/College Form** provides a framework of personal needs and occupational concerns through which an individual can view his or her life. The 220 items of the **Young Adult/College Form** focus on 22 occupational and personality characteristics. **Form II** contains 150 items and features in an expanded Self-Interpretive Digest, which highlights the interplay of personal values, interests, abilities, occupational preferences, job concerns, future plans, and how the combination of these points affects career development.	Levels: • Intermediate (grades 3-7) • From II (Junior High – Adult) • Young Adult/College (High School – Adult) • Adult Basic (Adult)	Related to the CRLS: • *Career Development* (awareness inventory)	Related to the Academic Content Standard: • *Reading* (The reading level and content of the **Adult Basic Form** are designed for adults with reading deficiencies. This form is ideal for readjusting the occupational alignment of adults participating in basic education programs.)	Hall Inventory does not specifically address the endorsement areas.	Face Validity: Representative claims there is face validity in all questions.	Reliability information is not available.	Reading levels vary for the four forms: • Intermediate form (written for grades 3-6 reading level) • Young Adult/College form (written for grades 6-8 reading level) • Adult Basic Form and Adult Basic Form II (written for grades 3-4 reading level)	No training is required. The Hall Inventory is self-explanatory.	Costs: • Young Adult/ College form - $35 for 20 inventory booklets • 20 response sheets - $24.85 • 20 interpretative folders - $24.85 • Young Adult/College Form Specimen Set with Counselor's Manual - $21.75 • Form II - $35.80 for 20 inventory booklets • 20 response sheets - $24.85 • 20 self-interpretative digests - $105.20 • Professional Manual - $18.05 • Form II Specimen Set w/ Professional Manual - $25.75	Con: This tool can help develop self-examination and can inventory self-awareness skills, but it is not an assessment

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JOB-O (CFKR Career Materials) The Job-O is a career assessment program. The Job-O 2000 and Job-O Enhanced are interest inventory assessments that are self-administered and self-scored by students. They can also be used as a tool for instruction by teachers. Job-O 2000 is a comprehensive program of self awareness, job exploration, and career decision making. It is not a test, it is a self-assessment career planning activity. Job-O Enhanced provides the student with the opportunity to explore occupations within eight occupational families. The jobs are sorted by level of education and training.	Job-O 2000 and JobO Enhanced are in paper and pencil format. They are also available in a Windows software format. The Job-O can be completely self administered and self scored by students. It is intended for classroom use. The answer folder contains information on 120 of the most popular, fastest growing occupations, with a listing of approximately 1,000 related jobs. This is intended to assist students in career decision making. The students will be able to: • Match their interests with different education and training levels • Examine a career preparation options in school and community • Identify a tentative career choice and update individual career plans • Develop an educational plan to meet tentative career choices	Grades 7-12 Job-O is intended for middle school and high school students but has up to an adult interest level.	Related to CRLS: • *Career Development*	Not specifically related to the academic content standards.	Not specifically related to the Endorsement Areas.	Claimed to be valid. Specific data is available on construct validity (inter-test correlations made with KUDER OIS), content validity (variables were cross-correlated with job-coding found in the Occupational Outlook Handbook, the GOE, and the updated DOE), and predictive validity (anecdotal reports made by former users of Job-O).	Normed for middle school and high school students. Reliability: In periodic tests, retests with standard time duration between administration there is evidence that a correlation above 90% is obtained between the scores obtained in the test and the scores obtained in the retest.	Job-O Enhanced is available in both English and Spanish in the printed edition. Job-O 2000 is written at a 7th grade reading level.	No training is necessary for administering the Job-O. The program manual contains simple instructions for teachers and students.	Job-O materials include reusable booklets and answer folders. Additional answer folders can be purchased at a nominal price. Job-O booklet: $4.20 Spanish Job-O booklet:$4.50 Job-O answer folder: $0.57 Job-O Software: $99.95 Site License (unlimited users): $399.95 Job-O can be used individually or in groups and can be completed in one 50 minute class period. For an expanded lesson, additional career awareness curriculum materials can be added by teachers to complement the Job-O program.	Con: This is mainly a career interest assessment tool.

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Strong-Campbell Interest Inventory (Consulting Psychologists Press, Inc.) Located at: http://www.cpp-db.com/cpp4.htm The Strong can be used by students exploring careers, clients considering job change, or individuals interested in career development. The *Strong's* 317 items measure interests in a broad range of occupations, work activities, leisure activities, and school subjects.	The *Strong Profile* is the basic career planning tool for anyone searching for career direction. Features of the *Profile* include: * The Snapshot: a graphic and personalized summary of results (one Snapshot per Profile) * The Personal Style Scales: a graphic presentation of comfort level in work and learning environments, leadership styles, and risk-taking situations * "Understanding Your Results on the Strong" – six pages of narrative and graphic information	Grades 7-12 (13-17, Adult)	There is no direct relationship to the CRLS standards, other than to explore where students' interests lie.	There is no direct relationship to the academic content standards.	There is no direct relationship to the Endorsement Areas.	There is no information available about validity.	72 Occupational Scales re-normed from the 1985 version There is no additional information about reliability.	Sample base represents a wide range of educational and socioeconomic levels There is no additional information about fairness or appropriateness for special populations.	Costs: * Profile Item Booklet/Answer Sheet (pkg of 10) - $69 * Strong Application and Technical Guide - $57.75 * Career Exploration: A Journey of Discovery worksheet (pkg of 25) - $18.50 * Where Do I Go Next? Using Strong Results to Manage Your Career (pkg of 10) - $40	*Additional information is being sent.*	*Additional information is being sent.*

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Vocational Research Interest Inventory (VRII) (Vocational Research Institute) The Vocational Research Interest Inventory (VRII), a 162-item interest assessment, measures a user's interest in 12 scales which correspond to the U.S. Department of Labor's Interest Areas. It is a paper and pencil and PC version of the Interest Survey developed for VRI's product "Apticom" (an individualized computer-based assessment for special populations).	Vocational Research Interest Inventory (VRII) is a vocational interest inventory that is available in paper and pencil or PC formats. The paper and pencil version is also available in Spanish. The U.S. Department of Labor's Interest Areas which VRII corresponds with are: * Artistic * Scientific * Plants/Animals * Protective * Mechanical * Industrial * Business Detail * Selling * Accommodating * Humanitarian * Lead/Influence * Physical Performing	Designed for use by adults and high school students.	Related to CRLS: * *Career Development*	Not related to academic content standards.	Related to Endorsement Area Frameworks: * *Natural Resource Systems* * *Human Resources* * *Business and Management* * *Industrial and Engineering Systems* * *Arts and Communications*	External evaluations claim that the tool is valid. Validity coefficients range from .72 to .85 depending on the Interest Area.	External evaluations claim that the tool is reliable. Reliability coefficients range from .74 to .86 depending on the Interest Area. VRII was initially normed for use by adults but recently renormed with high school age students.	VRII is written at a fourth grade reading level and offers age and gender-based norms. The paper and pencil version is also available in Spanish. VRI offers a comparable assessment, APTICOM, for special populations. APTICOM was designed to test aptitudes and interest of special populations such as people in rehabilitation programs, welfare to work programs, at-risk youth, etc. It is generally administered to individuals or small groups.	Scoring guides and users manuals are included with the assessment materials. If necessary, training is available by local VRI representatives for a negotiable cost.	This tool was designed to assess large groups relatively inexpensively. Costs vary depending on the version – hand scored or scantron. Depending on the form, the costs are between $0.75 to $1.00 per person.	Con: VRII is simply a career interest measurement.